functions. The modules referred to herein may, in some example embodiments, comprise processor-implemented modules.

[0273] Similarly, the methods or routines described herein may be at least partially processor-implemented. For example, at least some of the operations of a method may be performed by one or more processors or processor-implemented hardware modules. The performance of certain of the operations may be distributed among the one or more processors, not only residing within a single machine, but deployed across a number of machines. In some example embodiments, the processor or processors may be located in a single location (e.g., within a home environment, an office environment or as a server farm), while in other embodiments the processors may be distributed across a number of locations.

[0274] The performance of certain of the operations may be distributed among the one or more processors, not only residing within a single machine, but deployed across a number of machines. In some example embodiments, the one or more processors or processor-implemented modules may be located in a single geographic location (e.g., within a home environment, an office environment, or a server farm). In other example embodiments, the one or more processors or processor-implemented modules may be distributed across a number of geographic locations.

[0275] Unless specifically stated otherwise, discussions herein using words such as "processing," "computing," "calculating," "determining," "presenting," "displaying," or the like may refer to actions or processes of a machine (e.g., a computer) that manipulates or transforms data represented as physical (e.g., electronic, magnetic, or optical) quantities within one or more memories (e.g., volatile memory, non-volatile memory, or a combination thereof), registers, or other machine components that receive, store, transmit, or display information.

[0276] As used herein any reference to "one embodiment" or "an embodiment" means that a particular element, feature, structure, or characteristic described in connection with the embodiment is included in at least one embodiment. The appearances of the phrase "in one embodiment" in various places in the specification are not necessarily all referring to the same embodiment.

[0277] Some embodiments may be described using the expression "coupled" and "connected" along with their derivatives. For example, some embodiments may be described using the term "coupled" to indicate that two or more elements are in direct physical or electrical contact. The term "coupled," however, may also mean that two or more elements are not in direct contact with each other, but yet still co-operate or interact with each other. The embodiments are not limited in this context.

[0278] As used herein, the terms "includes," "comprising," "including," "has," "having" or any other variation thereof, are intended to cover a non-exclusive inclusion. For example, a process, method, article, or apparatus that includes a list of elements is not necessarily limited to only those elements but may include other elements not expressly listed or inherent to such process, method, article, or apparatus. Further, unless expressly stated to the contrary, "or" refers to an inclusive or and not to an exclusive or. For example, a condition A or B is satisfied by any one of the following: A is true (or present) and B is false (or not present), A is false (or not present) and B is true (or present), and both A and B are true (or present).

[0279] In addition, use of the "a" or "an" are employed to describe elements and components of the embodiments herein. This is done merely for convenience and to give a general sense of the description. This description, and the claims that follow, should be read to include one or at least one and the singular also includes the plural unless it is obvious that it is meant otherwise.

[0280] The patent claims at the end of this patent application are not intended to be construed under 35 U.S.C. § 112(f) unless traditional means-plus-function language is expressly recited, such as "means for" or "step for" language being explicitly recited in the claim(s).

1. A computer-implemented method for interacting with a distributed ledger maintained by a plurality of participants, the method comprising:

monitoring, at one or more processors, transactions on the distributed ledger;

identifying, at the one or more processors, a transaction related to a subrogation claim;

analyzing, at the one or more processors, the transaction related to the subrogation claim;

generating, at the one or more processors, a recommended subrogation resolution using a machine learning algorithm including determining a subrogation amount for an at-fault insurer, and a not-at-fault insurer;

transmitting, at the one or more processors, a transaction including the recommended subrogation resolution to a smart contract stored on the distributed ledger; and

identifying a subrogation claimant with a first cryptographic public key, and identifying a subrogation defendant with a second cryptographic public key; and, subsequently, sending data including a message signed by private keys corresponding to the first and second public keys identifying the subrogation claimant and the subrogation defendant in the smart contract.

2. The computer-implemented method of claim **1**, wherein monitoring transactions on the distributed ledger further comprises:

monitoring, at the one or more processors, a smart contract stored at an address on the distributed ledger.

3. The computer-implemented method of claim **1**, wherein identifying a transaction related to a subrogation claim further comprises:

identifying, at the one or more processors, a subrogation ID in a transaction; and

validating, at the one or more processors, the subrogation ID.

4. The computer-implemented method of claim **1**, wherein analyzing the transaction related to the subrogation claim further comprises:

analyzing, at the one or more processors, damages data contained in the transaction; and

analyzing, at the one or more processors, services rendered data contained in the transaction.

5. The computer-implemented method of claim **1**, wherein generating a recommended subrogation resolution using a machine learning algorithm further comprises:

executing, at the one or more processors, a machine learning algorithm using damages data and services rendered data included in the transaction.